Intercontinental Specialty Fats Sdn Bhd v Asahi Denka Kogyo KK

HIGH COURT (KUALA LUMPUR) — ORIGINATING MOTION NO D4–32–46 OF 1988

ABDUL AZIZ J

22 AUGUST 2000

Patents *— Infringement — Whether product infringe patent — Validity of patent — Whether patent new and involve inventive step — Whether inventive step would have been obvious to skilled person — Whether invention anticipated by prior art — Application of Patents Act 1983 s 38, whether apply to patent not granted under the Act*

The defendants were the proprietors of UK Patent GB 2028862B for an invention called 'cacao butter substitute' ('the subject patent'). In 1985, the defendants applied for the registration of the subject patent in West Malaysia under the Registration of United Kingdom Patents Act 1951 ('the 1951 Act'). The certificate of registration was issued on 18 July 1986. In December 1987, the defendants obtained a sample of product designated as CBE-025C. Analysis of the product by the defendants produced results which revealed that the proportion of fatty acids and types of glycerides contained in the product fell within the ranges laid down by Claim 1 of the subject patent. The plaintiffs admitted that they were the manufacturers of product CBE-025C in Malaysia. However, the plaintiffs maintained that their manufacture, export, sale and supply of the product did not constitute acts that infringe the subject patent because the subject patent was invalid. The plaintiffs sought declarations of invalidity and non-infringement brought under the Patents Act 1983 ('the 1983 Act'). The plaintiffs' case was that the subject patent was invalid because it was not new and did not involve an inventive step. It was submitted that the inventive step claimed by the defendants would have been obvious to a person having ordinary skill in the art. The invention was anticipated by prior art and that, having regard to the prior art, the inventive step would have been obvious to the skilled person. The matter of prior art relied on by the plaintiffs was the UK Patent Specification No 827172 belonging to Unilever Ltd ('the Unilever Specification'), published on 3 February 1960, which was prior to the priority date of the defendants' patent application claiming the invention, ie 30 August 1978. The plaintiffs also relied on s 38 of the 1983 Act in that they had already been manufacturing their product well before the date the defendants applied for the registration of the subject patent (18 July 1985) based on a contract dated 21 May 1985. The defendants, relying on a passage in *General Tire & Rubber Co v Firestone Tyre & Rubber Co Ltd* [1972] RPC 457 ('the passage'), said that the result of their experiment proved that their claim had not been anticipated by Unilever Specification.

Held, dismissing the application:

(1) Even if the plaintiffs could prove that they had been manufacturing their product since 21 May 1985, the court did not think that they could rely on s 38. The plaintiffs should not be allowed to rely on two priority dates, one for the grounds of anticipation and obviousness (30 August 1978) and another for the purpose of s 38 (18 July 1985). Further, it was doubtful whether s 38 was intended to apply in relation to a patent that was not granted under the 1983 Act (see p 783D–F).

(2) Prima facie, in the absence of argument as to why the experiment conducted by the defendants' expert was not acceptable for the application to it of that passage, the court would find it to be clearly established, on the basis of that passage, that Claim 1 of the defendants' patent had not been anticipated by Unilever Specification. The significance of the experiment of the defendants' expert was relied and submitted on by the defendants. The court did not find in the submission in reply of the plaintiffs any submission or argument to invalidate the experiment for the application of the passage. The court was persuaded that the prima facie position held good and that the passage applied in this case so as to lead the court to conclude that there was no case of anticipation (see pp 788H–I, 789B–C).

(3) The proportions containing a mixture of triglycerides of saturated and unsaturated fatty acids in the cocoa butter substitute were what the defendants found, after investigations on cocoa butter substitutes with various proportions of those matters, to be the proportions that would be required to be present in a cocoa butter substitute for it to constitute an achievement of the objective, ie a cocoa butter substitute having excellence in all three properties of fat-bloom resistance, thermal resistance and melting property in the mouth. Therefore, even to the defendants, those proportions were not obvious. They had to arrive at them — to have them revealed or brought to light — in their quest for the cocoa butter substitute having excellence in all three properties. The court was unable to appreciate how it could said that a cocoa butter substitute of the defendants' claimed invention, that was one having the constituent specifications claimed by the defendants, would have been obvious to the skilled person. It was plain that it would not (see pp 789D–F, 790B–C).

[Bahasa Malaysia summary

Defendan-defendan adalah pemilik Paten UK GB 2028862B untuk suatu rekaan yang dipanggil 'pengganti mentega koko' ('subjek paten tersebut'). Pada tahun 1985, defendan-defendan telah memohon untuk pendaftaran subjek paten tersebut di Malaysia Barat di bawah Akta Pendaftaran Paten United Kingdom 1951 ('Akta 1951'). Sijil

pendaftaran telah dikeluarkan pada 18 Julai 1986. Pada Disember 1987, defendan-defendan telah memperolehi sample produk yang dinyatakan sebagai CBE-025C. Analisa produk tersebut oleh defendan-defendan mewujudkan hasil yang menunjukkan bahawa kadar asid-asid lemak dan pelbagai jenis glyserid yang terkandung di dalam produk terssebut adalah kurang daripada kadar yang dinyatakan di dalam Tuntutan 1 subjek paten tersebut. Plaintif-plaintif mengaku bahawa mereka adalah pengeluar produk CBE-025C di Malaysia. Namun plaintif-plaintif berpendirian bahawa pengeluaran, eksport, penjualan dan pembekalan produk mereka tidak terjumlah kepada tindakan-tindakan yang melanggar subjek paten tersebut kerana subjek paten tersebut adalah tidak sah. Plaintif-plaintif memohon suatu deklarasi ketaksahan dan ketiadaan pelanggaran di bawah Akta Paten 1983 ('Akta 1983'). Kes plaintif adalah bahawa subjek paten adalah tak sah kerana ia bukanlah baru dan tidak melibatkan langkah rekaan. Adalah dihujahkan bahawa langkah rekaan yang dikatakan oleh defendan mestilah jelas kepada seseorang yang mempunyai kemahiran biasa dalam bidang tersebut. Rekaan tersebut adalah dijangkakan oleh kemahiran terdahulu dan bahawa memandangkan kemahiran terdahulu tersebut, langkah rekaan akan menjadi ketara kepada orang yang mahir. Perkara kemahiran terdahulu yang digantung harap oleh plaintif-plaintif adalah Akta Spesifikasi Paten UK No 827172 milik Unilever Ltd ('Speifikasi Unilever tersebut'), yang diterbitkan pada 3 Februari 1960, yang adalah lebih awal dari tarikh terdahulu permohonan paten defendan yang menuntut rekaan tersebut, iaitu 30 Ogos 1978. Plaintif-plaintif juga bergantung kepada s 38 Akta 1983 bahawa mereka telah pun mengeluarkan produk mereka sebelum tarikh defendan memohon untuk mendaftarkan subjek paten (18 Julai 1985) berdasarkan kontrak bertarikh 21 Mei 1985. Defendan telah bergantung harap kepada ungkapan di dalam *General Tire & Rubber Co v Firestone Tyre & Rubber Co Ltd* [1972] RPC 457 ('ungkapan tersebut'), menyatakan bahawa hasil daripada eksperimen mereka membuktikan bahawa tuntutan mereka belum lagi dijangkakan oleh Spesifikasi Unilever.

Diputuskan, menolak permohonan tersebut:

(1) Walaupun plaintif-plaintif boleh membuktikan bahawa mereka mengeluarkan produk mereka sejak 21 Mei 1985, mahkamah tidak berpendapat bahawa mereka boleh bergantung kepada s 38. Plaintif-plantif tidak sepatutnya dibenarkan untuk bergantung kepada dua tarikh terdahulu, satu untuk alasan jangkaan dan kejelasan (30 Ogos 1978) dan suatu lagi bagi tujuan s 38 (18 Julai 1985). Selanjutnya, ia adalah disangsikan sama ada s 38 adalah berniat untuk terpakai berkenaan dengan paten yang tidak dibenarkan di bawah Akta 1983 (lihat ms 783D–F).

(2) Secara prima facie, di sebalik ketiadaan hujahan-hujahan mengapa eksperimen yang dijalankan oleh pakar defendan tidak

boleh diterima untuk pemakaian kepadanya akan ungkapan tersebut, mahkamah mendapati sebagai jelas dibuktikan, berdasarkan ungkapan tersebut, bahawa Tuntutan 1 paten defendan tidak dijangkakan oleh Spesifkasi Unilever. Kepentingan eksperimen tersebut oleh pakar defendan telah digantung harap dan dikemukakan oleh defendan-defendan. Mahkamah tidak menemui di dalam hujahan balasan plaintif-plaintif sebarang hujahan atau pernyataan mentaksahkan eksperimen untuk pemakaian ungkapan tersebut. Mahkamah percaya bahawa kedudukan prima facie adalah berkekalan dan bahawa ungkapan terpakai di dalam kes ini sehingga membuatkan mahkamah menyimpulkan bahawa tidak terdapat kes jangkaan (lihat ms 788H–I, 789B–C).

(3) Kadar kandungan campuran trigliserid asid lemak tepu dan tak tepu di dalam pengganti mentega koko adalah apa yang ditemui oleh defendan, selepas siasatan-siasatan pengganti mentega koko dengan pelbagai kadar bahan-bahan tersebut, yang merupakan kadar yang diperlukan baginya untuk terjumlah kepada suatu pencapaian objektif, iaitu pengganti mentega koko yang kaya dengan ketiga-tiga bahan penentang lemak, penentang haba dan bahan mencair di dalam mulut. Oleh itu, walaupun bagi defendan-defendan, kadar-kadar tersebut bukanlah jelas. Mereka perlu menemui bagi diri mereka sendiri untuk mendedahkan dan mengemukakannya — di dalam usaha mereka untuk mencari pengganti mentega koko yang kaya dengan ketiga-tiga bahan tersebut. Mahkamah tidak dapat melihat bagaimana pengganti mentega koko yang dikatakan rekaan defendan, mempunyai spesifikasi konstituen yang dituntut oleh defendan-defendan, akan jelas kepada orang yang mahir. Ia adalah jelas bahawa ia tidak (lihat ms 789D–F, 790B–C).]

Notes

For cases on infringement of patents, see 10 *Mallal's Digest* (4th Ed, 1999 Reissue) paras 1023–1026.

Cases referred to

General Tire & Rubber Co v Firestone Tyre & Rubber Co Ltd [1972] RPC 457 (refd)

Legislation referred to

Patents Act 1983 ss 11, 14(1), (2)(a), (b), 15, 27A, 28, 38(1)
Registration of United Kingdom Patents Act 1951 ss 6, 7(1)

SF Wong (*SJ Jayakar* with him) (*Shearn Delamore & Co*) for the plaintiffs.

H Jayaram (*Yeoh Suat Gaik* with him) (*Ram Rais & Partners*) for the defendants.

Abdul Aziz J: The defendants are the proprietors of UK Patent GB 2028862B for an invention called 'cacao butter substitute' ('the subject patent'). The word 'cacao', by the way, is another term for 'cocoa'. The application for the patent was filed in the United Kingdom on 30 August 1978.

In 1985, the defendants applied for the registration of the subject patent in West Malaysia under the Registration of United Kingdom Patents Act 1951 ('the 1951 Act'), now repealed. The application was received by the Registrar of Patents on 18 July 1985. The Registrar issued a certificate of registration, No 463 of 1986, on 18 July 1986. By s 6 of the 1951 Act the defendants, by virtue of the certificate of registration, acquired 'privileges and rights similar in all respects to those conferred by the issue of the patent in the United Kingdom', which privileges and rights, according to s 7(1), 'shall date from the date of the patent in the United Kingdom', but subject to the following proviso:

> Provided that no action for infringement shall be entertained in respect of any manufacture, use or sale of the invention prior to the date of issue of the certificate of registration in West Malaysia.

Four claims are made by the subject patent. Claims 2, 3 and 4 are dependent on Claim 1, which I quote:

> 1 A cacao butter substitute comprising a mixture of triglycerides of saturated and unsaturated fatty acids wherein the saturated fatty acids comprise palmitic acid, stearic acid and arachidic acid with the proviso that the proportion of the palmitic acid radical to the total saturated fatty acid radicals is from 10 to 65 molar %, that of the stearic acid radical is from 20 to 86 molar % and that of the arachidic acid radical is from 4 to 15 molar %, wherein the unsaturated fatty acids comprise oleic acid and linoleic acid with the proviso that the amount of linoleic acid radical is less than 20 molar % based on the total unsaturated fatty acid radicals, and wherein the proportions of the triglycerides are as follows, based on the total triglycerides:
>
> 1 to 5 molar % of trisaturated triglycerides, 50 to 80 molar % of B unsaturated-a, a' -di-saturated triglycerides,
>
> zero to less than 5 molar % of a or a '-unsaturated-disaturated triglycerides,
>
> 15 to 50 molar % of a or a' -saturated diunsaturated triglycerides, zero to less than 5 molar % of B-saturated-diunsaturated triglycerides, and
>
> zero to less than 6 molar % of triunsaturated triglycerides, provided that the monounsaturated disaturated triglycerides contain more than one saturated fatty acid radical.

A triglyceride is a chemical compound that is present in most fats. It consists of a glycerol molecule combined with three fatty acids. A fatty acid is either saturated (S) or unsaturated (U). Triglycerides come in various types, depending on the types of the three fatty acids of which a triglyceride molecule is composed and on the relative positions of the three fatty acids in the triglyceride molecule. The cocoa-butter substitute of Claim 1

comprises a mixture of different types of triglycerides of saturated and unsaturated fatty acids. The mixture must satisfy two standards. One is the standard of the proportions of types of fatty acids in it. The other is the standard of the proportions of types of triglycerides in it. The types of fatty acids are three saturated, namely, palmitic, stearic and arachidic, and two unsaturated, namely oleic and linoleic. As to the proportions, each saturated fatty acid radical must bear a certain proportion to the total saturated fatty acid radicals, and each unsaturated fatty acid radical must bear a certain proportion to the total unsaturated fatty acid radicals. The proportions of fatty acids are as follows:

Saturated		
Plamitic	—	10–65 molar %
Stearic	—	20–86 molar %
Arachidic	—	4–15 molar %
Unsaturated		
Linoleic	—	less than 20 molar %

The proportions of the types of triglycerides are as listed in Claim 1 but I shall repeat them with a change in the names to names that use the letter 'S' for a saturated fatty acid and 'U' for an unsaturated fatty acid. The proportions are proportions to the total triglycerides and are as follows:

1–5 molar % of SSS triglycerides
50–80 molar % of SUS triglycerides
0–less than 5 molar % of SSU triglycerides
15–50 molar % of SUU triglycerides
0–less than 5 molar % of USU triglycerides
0–less than 6 molar % of UUU triglycerides

The mixture of triglycerides having such a composition of fatty acids and types of triglycerides was a finding arrived at as the culmination of a quest by the defendants for the ideal cocoa-butter substitute, that is, one that possesses excellence in three desired physical properties for a cocoa-butter substitute, namely, fat-bloom resistance, melting properly in the mouth and thermal resistance. In the specification of the subject patent, the defendants state that it is very difficult to obtain such a cocoa-butter substitute and that the one they have invented is distinct from other known cocoa-butter substitutes. The specification emphasizes the importance of keeping within the ranges of the various components, as, should there be failure in any respect to keep within the ranges, only one of the three physical properties will be achieved satisfactorily, but not the other two. The prescribed compositions of the mixture of triglycerides represents, therefore, a fine balance that has to be maintained in order to achieve excellence in the three

physical properties. The specification explains the reasons why, in order that the three properties be achieved, each component of fatty acid or type of triglyceride should be within the prescribed range and the adverse consequence to the achieving of the three properties if a particular component is not kept within the prescribed range. It explains, for example, why the SUU triglyceride has to be 15 to 50 molar % of the total triglycerides, why arachidic acid has to be 4 to 15 molar % of the total saturated fatty acids, and why linoleic acid has to be less than 20% of the total unsaturated fatty acids.

The specification says that the cocoa-butter substitute of the invention can be prepared from triglyceride compositions obtained by organic synthesis or obtained from natural oils and fats and processed natural oils and fats or obtained both by organic synthesis and from such oils and fats. Examples given of the sources of oils and fats are palm oil, shea butter, mowrah butter, sal-seed butter and fractionated butters of them. From the examples illustrating the invention, I form the understanding that irrespective of how or from where the triglyceride compositions are obtained, they have to be mixed in proper proportions so as to achieve the ultimate goal, namely, a mixture of triglycerides having the components prescribed in one of the four Claims. If they are not mixed in the proper proportions, that goal will not be achieved.

In December 1987, the defendants obtained a sample of a product designated as CBE-025C which was sold by Lam Soon (M) Bhd in China. Analysis of the product by the defendants produced results which revealed that the proportions of fatty acids and of types of glycerides contained in the product fell within the ranges laid down by Claim 1 of the subject patent. On 18 March 1988, the defendants wrote to a German company, the Walter Rau Co, giving the results of the analysis and stating their opinion that the product, which they called 'hard butter', was made by the plaintiffs in 'Malaya'. In stating that the product was covered by the subject patent, they lay emphasis on the amount of SUS triglycerides (74.5 molar %), which contained palmitic, stearic, arachidic and milistic acid radicals. The defendants said they could not accept the unauthorized use of their patented technology and they wanted to know from the Walter Rau Co the position on the matter.

The plaintiffs admit that they are the manufacturers of product CBE–025C and they say that they manufacture it by the use, under agreement, of technology and know-how from the Walter Rau Co, which is closely associated with the plaintiffs. They admit that the product obtained by the defendants had been manufactured by them in 'Malaysia' and sold to Lam Soon (M) Bhd. For the characteristics of their product they accept the defendants' analysis.

The plaintiffs, however, maintain that their manufacture, export, sale, supply and distribution of their product do not constitute acts that infringe the subject patent because the subject patent is invalid. By the present originating motion, they seek declarations of invalidity and non-infringement. Their case is brought under the Patents Act 1983 ('the 1983

Act') which repealed the 1951 Act and which came into force on 1 October 1986, less than three months after Certificate of Registration No 463 of 1986 was issued for the subject patent under the 1951 Act. The plaintiffs' case is that the subject patent is invalid because the invention for which it was granted is not patentable. It is not patentable because it is neither new nor does it involve an inventive step as required by s 11 of the 1983 Act. As to novelty, the plaintiffs rely on s 14(1), which says that 'an invention is new if it is not anticipated by prior art'. The plaintiffs say that it is not new because it is anticipated by prior art. Prior art consists of the matters in paras (a) and (b) of sub-s (2) of s 14. As to inventive step, the plaintiffs rely on s 15 which says:

> An invention shall be considered as involving an inventive step if, having regard to any matter which forms part of the prior art under paragraph (a) of subsection (2) of section 14, such inventive step would not have been obvious to a person having ordinary skill in the art.

The plaintiffs say that, having regard to the prior art, the inventive step claimed by the defendants would have been obvious to a person having ordinary skill in the art ('the skilled person').

The grounds, therefore, on which the plaintiffs seek to invalidate the subject patent are those of anticipation and obviousness, that is to say, that the invention is anticipated by prior art and that, having regard to the prior art, the inventive step would have been obvious to the skilled person. From the particulars of objection filed by the plaintiffs (encl 7), it would appear that the matter of prior art relied on by the plaintiffs is chiefly the UK Patent Specification No 827172 belonging to Unilever Limited ('the Unilever Specification'), which was published on 3 February 1960, some 18 years before the filing in the UK of the application for the subject patent. In relying on the Unilever Specification for the grounds of anticipation and obviousness, the plaintiffs might be looking to that component of prior art which is described by para (a) of sub-s (2) of s 14 as 'everything disclosed to the public, anywhere in the world, by written publication ... prior to the [filing date or, where appropriate,] priority date of the patent application claiming the invention', but from their particulars of objection it is clear that the date they rely on is the priority date and that to them the priority date is 30 August 1978, the date of filing in the United Kingdom of the application for the subject patent.

Before I examine the grounds of anticipation and obviousness, I shall deal with another question raised by the plaintiffs. It is based on sub-s (1) of s 38 of the 1983 Act, which provides as follows:

> (1) Where a person at the priority date of the patent application —
>
> (a) was in good faith in Malaysia making the product or using the process which is the subject of the invention claimed in the application;
>
> (b) had in good faith in Malaysia made serious preparations towards the making of the product or using the process referred to in paragraph (a), he shall have the right, despite the grant of the patent, to exploit the patented invention:

A

> Provided that the product in question is made, or the process in question is used, by the said person in Malaysia:
>
> Provided further that he can prove, if the invention was disclosed under the circumstances referred to in paragraphs (a), (b) or (c) of subsection (3) of section 14 that his knowledge of the invention was not a result of such disclosure.

B

The plaintiffs affirm that they had already been manufacturing their product well before the date the defendants applied for the registration of the subject patent under the 1951 Act, that is, 18 July 1985. To support their averment, they seek to rely on a contract dated 21 May 1985. That is the only date that they apparently are able to prove as the date since when C they had been manufacturing their product. Relying on s 38, they say in effect that at the priority date of the defendants' patent application, which to them is 18 July 1985, they were in good faith in Malaysia making the product which is the subject of the invention claimed in the subject patent, and therefore, despite the grant of the subject patent, they had and continue to have the right to exploit the invention of the subject D patent.

I do not propose to consider whether the contract relied on by the plaintiffs for proof of manufacture is proof indeed that they had been making their product in Malaysia since 21 May 1985, because, even if it were, I do not think the plaintiffs can rely on s 38. In the first place, I do not E think the plaintiffs should in this case be allowed to rely on two priority dates, one for the grounds of anticipation and obviousness, which they say is 30 August 1978, the date of filing in the United Kingdom of the application for the subject patent, and another for purposes of s 38, which they say is 18 July 1985, the date of application for registration of the patent under the 1951 Act. Since for anticipation and obviousness the priority date F is 30 August 1978, the plaintiffs should not claim another date in order to gain the benefit of s 38. In the second place, I doubt whether s 38 is intended to apply in relation to a patent that is not granted under the 1983 Act. The effect of s 38 is, inter alia, to give to the prior manufacturer the right to exploit another person's patented invention despite the grant of the G patent to that person. The patent must be one that is granted pursuant to a 'patent application' that is mentioned in sub-s (1), in relation to which the 'priority date' is mentioned in that subsection. The priority date, by s 27A, is the date of filing of the application, which is the date recorded by the Registrar under s 28 as the filing date. It must be an application made under the 1983 Act. It cannot be an application made under the repealed 1951 H Act. For one thing, that Act does not provide for the recording with particularity of the filing date as s 28 of the 1983 Act provides. Section 5 of the1951 Act merely provides that upon an application 'being received', the Registrar shall issue a certificate of registration. For another thing, the 1951 Act is not concerned with the granting of a patent, but only with the registration of patents granted in the United Kingdom. Certainly the I application mentioned in s 38 cannot be intended to refer to an application in the United Kingdom. So it appears to me that s 38 is only concerned with patents granted on patent applications under the 1983 Act and the right

given by s 38 must be a right as against patents granted under the 1983 Act and not patents granted in the United Kingdom and registered under the 1951 Act. A

The proviso to s 7(1) of the 1951 Act, which I mentioned at the beginning of this judgment, seems to strengthen my doubt as to the applicability of s 38 in relation to patents not granted under the 1983 Act. The proviso implies that an action for infringement of the subject patent may be entertained in respect of any manufacture, use or sale on and after 18 July 1986 — the date of issue of the certificate of registration under the 1951 Act — of the invention claimed by the subject patent. So if on or after 18 July 1986 the plaintiffs, as they themselves admit they have been doing, manufactured, used or sold their product, which is the invention claimed by the subject patent, an action for infringement brought by the defendants against the plaintiffs could be entertained. It cannot be that on 1 October 1986, when the 1983 Act came into force, the position became reversed and the plaintiffs acquired the right to exploit the invention, which would be the result were s 38 to be applied in their favour. B C D

The reasons that I have given for thinking that the plaintiffs cannot rely on s 38 have not been suggested in submission and are arrived at without the benefit of counsel's research and submission. I think counsel have not examined in depth the question of the application of the section. Not having had the benefit of counsel's research and submission, I am mindful of the possibility, although I am not aware as a fact, that in expressing my views on the question I have overlooked certain considerations that may be relevant to the question. E

To consider the plaintiffs' grounds of anticipation and obviousness, it is necessary to appreciate those aspects of the teachings of the Unilever Specification that the plaintiffs rely on. F

The invention declared in the Unilever Specification 'relates to cocoa-butter substitutes and to products containing them'. At p 1, in lines 47–63 it is said:

> The present invention is based on the discovery that a certain range of fats and mixtures of fats can be used as cocoa-butter substitutes. The substitutes may be used in products in which cocoa-butter is normally incorporated, in particular in chocolate. G
>
> The present invention comprises a process of preparing products in which cocoa-butter is normally incorporated, characterized in that *in making such products there is incorporated in place of at least part of the cocoa- butter that would normally be present a fraction of palm oil* having an iodine value not exceeding 45, preferably not exceeding 42, a softening point in the range 30 to 45°C, preferably 30 to 40°C and a dilatation at 20°C of not less than 1000 preferably not less than 1200. (Emphasis added.) H

The words that I have emphasized mean that the cocoa-butter substitute taught by the Unilever Specification is basically a palm-oil fraction having the stated properties. The manufacture of palm-oil fractions for use according to the invention is illustrated in examples 1 to 6. I

A At p 3 appears the passage that contains that part of the teachings of the Unilever Specification that has been the focus of attention in this case. It begins at line 37 with the following paragraph:

> It has also been found that the usefulness of the palm oil fractions specified can be increased by mixing them with certain naturally occurring vegetable fats other than cocoa-butter, in particular Borneo tallow, and the invention includes mixtures of these fats, described more particularly below, with the palm oil fractions.

We are told there that the use of palm-oil fractions is not good enough and that certain naturally-occurring vegetable fats, other than cocoa-butter itself, is mixed with the palm-oil fractions to increase the usefulness of the palm-oil fractions. Of the naturally-occurring vegetable fats, Borneo tallow is particularly mentioned, but mention of the other fats is to be found further on.

The passage goes on to say:

> The effect of the addition of these fats, and in particular Borneo tallow, to the palm oil fractions is to give a substitute having a cooling curve closer to that of cocoa-butter itself than has the palm oil fraction alone.

We learn from there that the reason for the addition of those fats to the palm-oil fractions is to produce a cocoa-butter substitute having a cooling-curve that is closer to that of cocoa-butter itself than the cooling-curve that the palm-oil fractions alone have.

Then follows this paragraph:

> These additional fats have a high content, 50% or more, and in the preferred fats 60% or more, of triglycerides containing one unsaturated fatty acid radical and two saturated fatty acid radicals derived from palmitic and/or stearic acid. The remainder of the fat is composed of diunsaturated glycerides, with at the most not more than a few per cent of trisaturated or triunsaturated glycerides. The unsaturated fatty acid radicals of the glycerides of these additional fats are substantially wholly those of the normal cis-form of 9 : 10-oleic acid. Stearic acid radicals form at least 50% of the saturated acid radicals of the disaturated glycerides, and in the best fats for this purpose the proportion is of the order of 75%. Such naturally occurring, vegetable fats are hereinafter called 'Borneo tallow type fats'.

The paragraph is informative as to the triglyceride and fatty acid composition of those additional fats. Since it relates to a point that I will deal with subsequently, I particularly refer to the information at line 62 that 'Stearic acid radicals form at least 50% of the saturated acid radicals of the disaturated glycerides ...'. That is a statement as to the proportion of stearic acid radicals to the saturated acid radicals of the disaturated glycerides in the additional fats.

The next paragraph specifies what are the naturally-occurring vegetable fats that are to be added to the palm-oil fractions. It says:

> Naturally-occurring vegetable fats which fulfil the requirements set out above are Borneo tallow (commonly marketed under the name 'Illipe Butter'), which is generally derived from Shorea robusta and Shorea stenoptera, and

> fats derived from Allanblackia floribunda, Allanblackia Stuhlmannii, Garcinia indica, Pentadesma butyracea, or Palaquim oleosum.

The additional fats are therefore Borneo tallow and fats derived from the five named plants. Borneo tallow is said to be generally derived from the plants Shorea robusta and Shorea stenoptera.

In the affidavits there has been controversy as to whether sal fat, which is derived from the sal tree (Shorea robusta), can be construed to be intended for inclusion by the term 'Borneo tallow', but in submission learned counsel for the defendants decided not to pursue the controversy, conceding, I think, that the term covers both sal fat derived from Shorea robusta and the fat from Shorea stenoptera.

The paragraph that ends that passage says this:

> The proportions in which these fats may be added to the palm oil fraction will depend upon the nature of the fat and the particular palm oil fraction used. The minimum proportion will normally, however, be about 20% by weight of the mixture but higher proportions, for example 50 to 75%, or more may be used.

It is to be noted that the proportion of the additional fats to be added to the palm-oil fraction is variable. It depends on the nature of the additional fat and the particular palm-oil fraction used. The proportion may vary within the range of 20% to 75%. It is also to be noted that the passage does not specify what is the ideal target of cocoa-butter substitute to be achieved by the addition of the additional fats to the palm-oil fraction, so that the results of following the teaching in the last paragraph will be various and will differ according to the nature of the additional fat used, the particular palm-oil fraction used and the percentage selected of the additional fat.

To prove that the cocoa-butter substitute claimed by the subject patent had been anticipated by the Unilever Specification, the applicants professed expert ('Brinkmann') prepared a cocoa-butter substitute by, so he says, following the teachings of the Unilever Specification. He first produced a palm-oil fraction by exactly following the procedure laid down in Example 2 in the Unilever Specification. He then made a mixture of neutralized, bleached sal fat and the palm-oil fraction thus produced. The use of sal fat is admittedly taught by the Unilever Specification. The proportion of the sal fat in the mixture was 50%, which was within the range taught by the Unilever Specification. Analysis of the product revealed that its composition of fatty acids and triglycerides fell in all respects within Claim 1 of the subject patent.

In his submission, learned counsel for the defendants said that the defendants did not question the method used by Brinkmann to produce the cocoa-butter substitute in accordance with the Unilever Specification or that the cocoa-butter substitute that was produced satisfied Claim 1 of the subject patent, but he reiterated the contention of the defendants' expert in para 19 of his affidavit dated 23 July 1990 that while the Unilever Specification teaches the use of other raw materials than sal fat and does not suggest the selection of a particular raw material, Brinkmann intentionally

A selected raw materials revealed in the subject patent that would ensure that the product would fall within Claim 1 of the subject patent. Learned counsel for the defendants offered two proofs of that contention, one primary, the other secondary.

I shall mention the secondary proof first. It was prompted by my B noticing in the course of submission the fact that at p 3 line 62 of the Unilever Specification it is said that in the additional fats that are to be added to the palm-oil fraction, 'Stearic acid radicals form at least 50% of the saturated acid radicals of the disaturated glycerides', whereas in the product of Brinkmann's experiment the percentage of stearic acid was 38%, which nevertheless fell within the range of 20–86 molar % of Claim 1 of the C subject patent. It was argued, therefore, that since the Unilever Specification prescribed the use of additional fats having at least 50% of stearic acid content and since Brinkmann's test product contained 38%, Brinkmann did not follow strictly the Unilever Specification but nevertheless brought his test product within the subject patent. The D argument is patently flawed. The 50% relates to the intrinsic property of the additional fats the use which is taught by the Unilever Specification, whereas the 38% relates to the property of the resultant product. Brinkmann did use an additional fat the use of which is taught by the Unilever Specification, namely sal fat — its stearic acid content being merely a matter of information — and produced a product whose stearic E acid content fell within the range in Claim 1 of the subject patent. Brinkmann did not use an additional fat that is not specified by the Unilever Specification or whose stearic acid content was lower than what the specified additional fats are said by the Unilever Specification to contain. The secondary proof therefore fails.

F The primary proof is an experiment done by the defendants' expert to produce a cocoa-butter substitute according to the teachings of the Unilever Specification. He first produced a palm-oil fraction following the manner taught in Example 3 in the Unilever Specification. He then mixed it with illipe oil, which I assume is 'Illipe Butter', which the Unilever Specification says is the name under which Borneo tallow, an additional fat specified by G the Unilever Specification, is commonly marketed. He obtained two mixtures, one in which the proportion of illipe oil was 50 parts by weight, and another in which the proportion of illipe oil was 80 parts by weight, both the proportions being within the teachings of the Unilever Specification. It was found that the compositions of triglycerides in the two H oil mixtures did not fall within the claims of the subject patent. For example, while Claim 1 of the subject patent specifies the proportion of 4 to 15 molar % as the proportion of arachidic acid radicals to the total fatty acid radicals, in respect of the two oil mixtures the proportion of arachidic acid radicals was 0.8% and 0.6% respectively. The oil mixtures were separately used to make chocolate and the chocolate in either I case was found to be inferior to the chocolate of the subject patent in terms of fat-bloom resistance, thermal resistance and melting property in the mouth.

The result of the defendants' experiment is important for their case by reason of the following passage at pp 485 and 486 of *General Tire & Rubber Co v Firestone Tyre & Rubber Co Ltd* [1972] RPC 457:

> ... If the prior inventor's publication contains a clear description of, or clear instructions to do or make, something that would infringe the patentee's claim if carried out after the grant of the patentee's patent, the patentee's claim will have been shown to lack the necessary novelty, that is to say, it will have been anticipated. The prior inventor, however, and the patentee may have approached the same device from different starting points and may for this reason, or it may be for other reasons, have so described their devices that it cannot be immediately discerned from a reading of the language which they have respectively used that they have discovered in truth the same device; but if carrying out the directions contained in the prior inventor's publication will inevitably result in something being made or done which, if the patentee's patent were valid, would constitute an infringement of the patentee's claim, this circumstance demonstrates that the patentee's claim has in fact been anticipated.
>
> If, on the other hand, the prior publication contains a direction which is capable of being carried out in a manner which would infringe the patentee's claim, but would be at least as likely to be carried out in a way which would not do so, the patentee's claim will not have been anticipated, although it may fail on the ground of obviousness. To anticipate the patentee's claim the prior publication must contain clear and unmistakeable directions to do what the patentee claims to have invented: *Flour Oxidizing Co Ltd v Carr & Co Ltd* ((1908) 25 RPC 428 at 457, line 34, approved in *British Thomson-Houston Co Ltd v Metropolitan-Vickers Electrical Co Ltd* (1927) 45 RPC 1 at 24, line 1). A signpost, however clear, upon the road to the patentee's invention will not suffice. The prior inventor must be clearly shown to have planted his flag at the precise destination before the patentee.

Relying on that passage, the defendants in effect say that the result of their experiment proves that their claim has not been anticipated by the Unilever Specification because carrying out the directions contained in the Unilever Specification would not '*inevitably* result in [a cocoa-butter substitute] being made ... which ... would constitute an infringement of the [defendants'] claim' in view of the fact that although the Unilever Specification 'contains a direction which is capable of being carried out in a manner which would infringe the [defendants'] claim', the direction, as was actually proved by the defendants' experiment, 'would be at least as likely to be carried out in a way which would not do so'. To the defendants, the Unilever Specification might be a 'signpost, however clear,' by following which one might in the end arrive at the defendants' invention, but that is not sufficient for anticipation, which requires it to be clearly shown, which has not been done, that Unilever, by their Specification, had 'planted [their] flag at the precise destination before [the defendants]'. (Emphasis added.)

Prima facie, in the absence of argument as to why the experiment conducted by the defendants' expert is not acceptable for the application to it of that passage, in particular the second para thereof, I would find it to be clearly established, on the basis of that passage, that Claim 1 of the defendants' patent has not been anticipated by the Unilever Specification.

A I might add that actually, in my opinion, reliance on that passage does not require the defendants to allege what Brinkmann had done in order to ensure that the cocoa-butter substitute that he produced in purported compliance with the teachings of the Unilever Specification met with the requirements of Claim 1 of the subject patent. All that the defendants need to establish is that the teachings of the Unilever Specification 'would be at B least as likely to be carried out in a way which would not do so', that is, would not result in a cocoa-butter substitute that infringes the defendants' claim.

The significance of the experiment of the defendants' expert was relied and submitted on by learned counsel for the defendants. I do not find in the C submission in reply of learned counsel for the plaintiffs any submission or argument to invalidate the experiment for the application of the passage that I have quoted. I am persuaded that the prima facie position that I have mentioned holds good and that the passage applies in this case so as to lead me to conclude that there is no case of anticipation.

D I turn now to the question of obviousness.

As has been seen, the invention claimed in the subject patent is a cocoa-butter substitute comprising a mixture of triglycerides of saturated and unsaturated fatty acids in which the acids 'and the types of triglycerides exist in definite proportions. Those proportions were not the objective that the E defendants set out to achieve. Their objective was a cocoa-butter substitute having excellence in all the three properties of fat-bloom resistance, thermal resistance and melting property in the mouth. Those proportions were what the defendants found, after investigations on cocoa-butter substitutes with various proportions of those matters, to be the proportions that would be required to be present in a cocoa-butter substitute for it to constitute an F achievement of that objective. I agree, therefore, with learned counsel for the defendants that even to the defendants those proportions were not obvious. They had to arrive at them — to have them revealed or brought to light — in their quest for the cocoa- butter substitute having excellence in all the three properties.

G Learned counsel for the plaintiffs submitted nonetheless that the combination of those proportions in the defendants' cocoa-butter substitute was, at the priority date, obvious from the Unilever Specification, giving as his reason for saying so the fact that Brinkmann, by following the directions of the Unilever Specification, produced a cocoa-butter substitute containing proportions of those matters that fell within the ranges of the H cocoa-butter substitute claimed by the defendants.

It was argued in response by learned counsel for the defendants that the skilled person reading the Unilever Specification would not know that by following its teachings he would produce a cocoa-butter substitute having the same combination of proportions of fatty acids and types of triglycerides I that is specified in the subject patent. I would add that it seems to me he would not even know what combinations of proportions of those things the cocoa-butter substitute would contain.

As to how Brinkmann managed, by purportedly following the Unilever Specification, to succeed in producing a cocoa-butter substitute satisfying the specifications of the defendants' claim, the defendants' expert says in para 14 of his affidavit dated 23 July 1990 that the test data 'seem to be manufactured intentionally to fall within the scope of the invention claimed by the patent' and, in para 27 of his affidavit dated 1 March 1991, that the test 'was conducted in accordance with a combined knowledge of the Unilever specification and test conditions taught by the defendant's patent'.

Notwithstanding the test results produced by Brinkmann, I am unable to appreciate how it can be said that, having regard to the Unilever Specification, a cocoa-butter substitute of the defendants' claimed invention, that is one having the constituent specifications claimed by the defendants, would have been obvious to the skilled person. It is plain to me that it would not.

The plaintiffs fail in their objections to the defendants' patent. I dismiss their application with costs.

Application dismissed.

Reported by Jafisah Jaafar